This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

-29-(Currently amended)

A method for producing an antibody against a *Sarcocystis neurona* antigen selected from the group consisting of a 16 (±4) kDa antigen and a 30 (±4) kDa antigen, as determined by SDS polyacrylamide gel electrophoresis, comprising:

(a) providing ~~a microorganism containing a DNA encoding a fusion polypeptide in which~~ a *Sarcocystis neurona* antigen selected from the group consisting of the 16 (±4) kDa antigen and the 30 (±4) kDa antigen ~~is fused to a polypeptide which enables isolation of the fusion polypeptide by affinity chromatography;~~

~~(b) culturing the microorganism in a culture to produce the fusion polypeptide from the DNA;~~

~~(c) isolating the fusion polypeptide from the culture by affinity chromatography;~~

~~(d)~~ (b) admixing the ~~fusion polypeptide isolated by the affinity chromatography~~ antigen with an adjuvant to produce an admixture;

~~(e)~~ (c) immunizing a mammal with the admixture ~~containing the fusion polypeptide and the adjuvant~~ to produce antibodies against ~~the 16 kDa~~ antigen ~~or the 30 kDa antigen comprising the fusion polypeptide~~; and

~~(f)~~ (d) removing serum from the immunized mammal and isolating from the serum the antibody against the *Sarcocystis neurona* antigen selected from the group consisting of the (±4) 16 kDa antigen and the (±4) 30 kDa antigen.

-30-(Currently amended)

A method for producing a monoclonal antibody against a *Sarcocystis neurona* antigen selected from the group consisting of a 16 (±4) kDa antigen and a 30 (±4) kDa antigen, as determined by SDS polyacrylamide gel electrophoresis, comprising:

(a) providing ~~a microorganism containing a DNA encoding a fusion polypeptide in which~~ a *Sarcocystis neurona* antigen selected from the group consisting of the 16 (±4) kDa antigen and the 30 (±4) kDa antigen ~~is fused to a polypeptide which enables isolation of the fusion polypeptide by affinity chromatography;~~

~~(b) culturing the microorganism in a culture to produce the fusion polypeptide from the DNA;~~

~~(c) isolating the fusion polypeptide from the culture by the affinity chromatography;~~

~~(d)~~ (b) admixing the ~~fusion polypeptide isolated by the affinity chromatography~~ antigen with an adjuvant to produce an admixture;

~~(e)~~ (c) inoculating mice with the admixture ~~containing the fusion polypeptide and the adjuvant~~ to produce antibodies against ~~the 16 kDa~~ antigen ~~or the 30 kDa antigen comprising the fusion polypeptide~~;

~~(f)~~ (d) removing the spleens from the mice which produce the antibodies against the ~~fusion polypeptide~~ antigen;

~~(g)~~ (e) removing spleen cells from the spleens and mixing the spleen cells from the spleens with mouse myeloma cells to produce a mixture of fused cells consisting of spleen cells fused to myeloma cells, the spleen cells, and the myeloma cells;

~~(h)~~ (f) selecting the fused cells on cell culture medium in which the fused cells can grow but in which the spleen cells and the myeloma cells cannot grow; and

~~(i)~~ (g) screening the fused cells for fused cells which produce the monoclonal antibody against the *Sarcocystis neurona* antigen selected from the group

consisting of the 16 (±4) kDa antigen and the 30 (±4) kDa antigen to produce the monoclonal antibody.

Claims 32-35 (Cancelled)